

# APPARATUS AND METHOD FOR DETECTING LOSS OF HIGH-SPEED SIGNAL

## Abstract

An apparatus and method is provided for detecting loss of differential signal carried by a pair of differential signal lines. According to the method, a common mode level is detected from voltages on the pair of differential signal lines. A threshold level is generated, referenced to the detected common mode level. A signal level is generated from the voltages on the pair of differential signal lines, the signal level being averaged over a first period of time. From the threshold level and the detected common mode level a reference level is generated, the reference level being averaged over a second period of time longer than the first period of time. The signal level is compared to the reference level to determine if a signal is present on the pair of differential signal lines.